

FORM PTO-1390
(REV 12-29-99)

U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE

ATTORNEY'S DOCKET NUMBER

**TRANSMITTAL LETTER TO THE UNITED STATES
DESIGNATED/ELECTED OFFICE (DO/EO/US)
CONCERNING A FILING UNDER 35 U.S.C. 371**

41172

U.S. APPLICATION NO. (If known, see 37 CFR 1.5)

09/786328

INTERNATIONAL APPLICATION NO.

PCT/EP99/05303

INTERNATIONAL FILING DATE

July 24, 1999

PRIORITY DATE CLAIMED

January 11, 1999

TITLE OF INVENTION

METHOD FOR PRODUCING A FOAM ELEMENT, ESPECIALLY A FOAM ELEMENT FOR A PLANE OR VEHICLE SEAT

APPLICANT(S) FOR DO/EO/US


KONSTANTINOS POULAKIS

Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:

1. ☒ This is a **FIRST** submission of items concerning a filing under 35 U.S.C. 371.
2. ☐ This is a **SECOND** or **SUBSEQUENT** submission of items concerning a filing under 35 U.S.C. 371.
3. ☐ This express request to begin national examination procedures (35 U.S.C. 371(f)) at any time rather than delay examination until the expiration of the applicable time limit set in 35 U.S.C. 371(b) and PCT Articles 22 and 29(1).
4. ☒ A proper Demand for International Preliminary Examination was made by the 19th month from the earliest claim priority date.
5. ☒ A copy of the International Application as filed (35 U.S.C. 371(c)(2))
 - a. ☒ is transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ has been transmitted by the International Bureau.
 - c. ☐ is not required, as the application was filed in the United States Receiving Office (RO/US).
6. ☒ A translation of the International Application into English (35 U.S.C. 371(c)(2)).
7. ☒ Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))
 - a. ☐ are transmitted herewith (required only if not transmitted by the International Bureau).
 - b. ☐ have been transmitted by the International Bureau.
 - c. ☐ have not been made; however, the time limit for making such amendments has NOT expired.
 - d. ☒ have not been made and will not be made.
8. ☐ A translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).
9. ☒ An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).
10. ☐ A translation of the annexes to the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).

Items 11. to 16. below concern document(s) or information included:

11. ☒ An Information Disclosure Statement under 37 CFR 1.97 and 1.98.
12. ☒ An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.
13. ☒ A FIRST preliminary amendment.
☐ A SECOND or SUBSEQUENT preliminary amendment.
14. ☐ A substitute specification.
15. ☐ A change of power of attorney and/or address letter.
16. ☒ Other items or information:
Translation of Preliminary Examination Report

U.S. APPLICATION NO. (if known, see 37 CFR 1.53) 097786328		INTERNATIONAL APPLICATION NO. PCT/EP99/05303		ATTORNEY'S DOCKET NUMBER 41172	
17. <input checked="" type="checkbox"/> The following fees are submitted: BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)) : Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO \$1,000.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO \$860.00 International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO \$710.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) but all claims did not satisfy provisions of PCT Article 33(1)-(4) \$690.00 International preliminary examination fee paid to USPTO (37 CFR 1.482) and all claims satisfied provisions of PCT Article 33(1)-(4) \$100.00 ENTER APPROPRIATE BASIC FEE AMOUNT =				CALCULATIONS PTO USE ONLY	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE		
Total claims	11 - 20 =	0	X \$18.00	\$	
Independent claims	1 - 3 =	0	X \$80.00	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable)			+ \$270.00	\$	
TOTAL OF ABOVE CALCULATIONS =				\$ 860.00	
Reduction of 1/2 for filing by small entity, if applicable.				\$	
SUBTOTAL =				\$	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
TOTAL NATIONAL FEE =				\$ 860.00	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property				\$ 40.00	
TOTAL FEES ENCLOSED =				\$ 900.00	
				Amount to be refunded:	\$
				charged:	\$
a. <input checked="" type="checkbox"/> A check in the amount of \$ <u>900.00</u> to cover the above fees is enclosed. b. <input type="checkbox"/> Please charge my Deposit Account No. _____ in the amount of \$ _____ to cover the above fees. A duplicate copy of this sheet is enclosed. c. <input checked="" type="checkbox"/> The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. <u>18-2220</u> . A duplicate copy of this sheet is enclosed.					
NOTE: Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the application to pending status.					
SEND ALL CORRESPONDENCE TO Roylance, Abrams, Berdo & Goodman, L.L.P. 1300 19th Street, N.W., Suite 600 Washington, D.C. 20036 (202) 659-9076					
 SIGNATURE Mark S. Bicks NAME 28.770 REGISTRATION NUMBER					

41172

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of :
: PATENT
KONSTANTINOS POULAKIS :
Serial No.: NEW : Group Art Unit:
: Examiner:
Filed: Herewith :
For: METHOD FOR PRODUCING A FOAM :
ELEMENT, ESPECIALLY A FOAM :
ELEMENT FOR A PLANE OR VEHICLE :
SEAT

PRELIMINARY AMENDMENT

Commissioner for Patents
Washington, D.C. 20231

Sir:

Preliminary to examination and calculation of the filing fee, please amend the above-identified application as follows:

In the Claims:

Claim 4, line 1, change "Claim 2 or 3" to -- claim 2 --.

Claim 6, line 1, change "one of the Claims 1 to 5" to -- claim 1 --.

Claim 9, line 1, change "Claim 7 or 8" to -- claim 7 --.

Claim 10, line 1, change "Claims 8 and 9" to -- claim 9 --.

Claim 11, lines 1-2, change "one of the Claims 1 to 10" to -- claim 1 --.

REMARKS

The above changes eliminate multiple dependency in the claims.

Respectfully submitted,



Mark S. Bicks

Reg. No. 28,770

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Dated: Mar 2, 2001

CERTIFICATION OF TRANSLATION

I, Susan M. Eakins, of Alexandria, Virginia, do hereby certify that I am an experienced and professional translator of German into English and that the attached English language translation of the German language patent specification titled VERFAHREN ZUM HERSTELLEN EINES SCHAUMKOERPERTEILES, INSBESONDERE EINES POLSTERSCHAUMTEILES FUER EINEN FLUG- ODER FAHRGASTSITZ, Inventor Hn. Poulakis, to Applicant GOTTLIEB BINDER GMBH & CO. et al, is a true and correct translation of the German language document taken in its sense as an entirety attached thereto.

I do hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of any United States Trademark or Patent Application pertinent thereto.



Susan M. Eakins

Date:

January 21, 2001

METHOD FOR PRODUCING A FOAM ELEMENT, ESPECIALLY A FOAM
PADDING ELEMENT FOR A PLANE OR VEHICLE SEAT

The invention relates to a method for producing a foam element, especially a foam padding element for a plane or vehicle seat, in which a layer of material is applied to at least one shaping wall section of a foaming mold, which material layer during the foaming process forms a barrier layer between the foam material and the relevant wall section.

Methods of this sort are already known. The construction of a barrier layer which prevents direct engagement of the foam material with the shaping wall of the foaming mold tends to simplify removal from the mold, and caking or baking onto the shaping wall is prevented in the area of the barrier layer. However problems arise with the application of such a layer forming the barrier layer and with its fixation to the shaping wall. Because of the application of the forces working during the foaming process on the shaping wall section, the danger of displacement of the layer which has been inserted into and embedded in the mold and/or the danger of formation of folds exists, whereupon among other things surface defects or flaws arise on the foam element being produced.

The object of the invention is to demonstrate a method of the aforementioned type which is distinguished by its capacity for simple execution and therefore leads to improved properties of the products obtained by the method.

With a method of this type this problem is solved according to the invention in that a fleece with ferromagnetic coating is used as the layer forming the barrier layer and that the fleece is held in its position detachably on the wall section by means of a cooperating device producing a

magnetic field.

The use of a ferromagnetically coated fleece provided by the invention obtains a plurality of remarkable advantages. The embedding into the foaming mold is set up to be very simple. The fleece need only be engaged on the wall of the foaming mold, on which it is held in position by the cooperation of the ferromagnetic coating with the magnetic field being generated on the relevant wall section. To produce the magnetic field, permanent magnets are provided preferably in suitable layer arrangement on the foaming mold. The fleece fits snugly with its ferromagnetic coating without forming folds on the shaping wall, and as required it is fitted to a contoured strip of the relevant wall section. The layer of fleece remains held in place by the magnetic holding forces during the foaming process.

While the ferromagnetic coating of the fleece engaging on the wall section of the foaming mold forms a good foam barrier, in other words a very effective protection layer against the wearing through of foam material on the wall section, the reverse side of the fleece which is free of coating facilitates a good binding with the foam element produced during the foam process, by penetration of the foam material into the structure of the fleece. This fleece is thus fastened securely to the relevant surface area of the foam element by means of the foaming attachment. In this relationship the method of the invention is suitable in a special manner for the production of foam padding parts for seats, in which mechanical devices are built into or built on the reverse or interior side of the relevant foam padding part, which are for example operating devices for seat or backrest adjustment and/or for the adjustment of headrests relative to backrests. The fleece fastened to the relevant surface areas of the foam padding part with its ferromagnetic coating forms a friction-free protection layer to counter wearing through of the foam part by the relevant mechanical parts.

Preferably a composition is used as ferromagnetic coating, the composition including 80 parts polyurethane and 20 parts ferrite powder which is processed with a binding agent into an easily spreadable mass of material. This material is preferably wiped on by means of a blade or coating nozzle forming a strip on a relevant carrier which is being moved relative to the applicator.

With this arrangement, the fleece to be coated in turn can be used as carrier, and the easily spreadable material is spread directly thereon.

Alternatively a strip of a silicon-coated carrier (e.g. paper or foil) can be moved relative to the applicator and thus can be provided with the coating. In this case the coated carrier together with a strip of the fleece while being supported is guided through a laminating arrangement and the coating of the carrier is applied by lamination on the fleece. Following separation of the strips of the carrier and the fleece carrying the coating, the carrier can be rolled up in order to be used again for another coating process.

The object of the invention is also a foam element produced by the method disclosed, the foam element incorporating the features included in Claim 11.

Hereinafter the invention is to be explained in greater detail relative to the drawing. In the drawing are shown :

- Fig. 1 a perspective view of a foam padding element which forms the frontal support part of the backrest of a vehicle seat;
- Fig. 2 a reverse view of the arrangement of the foam padding element shown in Fig. 1, in somewhat larger scale,
- Fig. 3 a diagrammatically considerably simplified representation of a device for the production of a coated fleece for use during execution of the method

according to the invention, and

Fig. 4 a representation similar to that of Fig. 3 of a modified device for the production of a coated fleece.

Fig. 1 shows a foam element 1 in the form of a foam padding element for a vehicle seat, whereby it involves the front part of a backrest support which on its forward side 3 incorporates the shape which is ergonomically suitable for the support of the back of the rider in the seat. On its reverse side 5 the foam element 1 forms a depression in the form of a shallow saucer, which is intended to receive the mechanisms associated with the backrest, in other words having to do with the supporting metal frame as well as the operation and adjustment devices, for example for the height adjustment of the headrest, of which the support rods extend upward through the top part of foam element 1. These components indicated here as 'mechanisms' are not shown in the drawing.

As is especially clear in Fig. 2, the base of the saucer-like depression on reverse side 5 is covered by a fleece 7, which during the foaming process is attached by foaming onto the relevant surface of foam element 1. The exposed exterior of fleece 7 has a ferromagnetic coating 9. Ferrite particles are added to coating 9, which in the present example is a layer of a polyurethane, and then on the exposed exterior of fleece 7 it forms a smooth, thick and friction-free layer. Coating 9 has such an effect during the foaming process, wherein coating 9 engages on the shaping wall of the foaming mold, where it serves as a foam barrier, that the foam material in cooperation with the free reverse side of fleece 7 can indeed attain a good binding, which is prevented nonetheless by said coating 9 from direct contact with the shaping wall. Thus any caking or baking of the foam material onto the shaping wall is avoided and the shaping of the foam element is simplified.

Because of the ferromagnetic property of coating 9, the fleece 7 following embedding in the

foaming mold can be secured in its engagement on the shaping wall of the same, by means of a suitable magnet arrangement which can provide security. A thrusting, folding, warping or twisting by the forces coming into play during the foaming process is therefore avoided, without requiring the provision of special holding means on the shaping wall of the foaming mold. Strips of permanent magnets could be provided to serve as the magnet arrangement, being arranged along the edges of fleece 7 on the exterior of the foaming mold.

Fleece 7, which, as shown in Figs. 1 and 2, is foamed on foam element 1 in such a manner that coating 9 is turned toward the mechanism mounted in the backrest of the relevant vehicle seat, with its coating 9 forms a smooth, low-friction and wear-resistant layer and therefore provides protection against wearing through of the surface of foam element 7 by parts of the mechanism as a result of their vibrations or as a result of operational movements of corresponding mechanism parts.

Figs. 3 and 4 show in detail two different methods of proceeding for production of fleece 7 with ferromagnetic coating 9. In both cases, the basic material which is used is a non-coated PET-fleece 11 of 20 to 60 g/m² and preferably approximately 40 g/m², to which is applied the 60 to 100 g/m² and preferably approximately 80 g/m² of ferromagnetic coating 9. This coating is applied as spreadable material by wiping on with an applicator. This material can for example be a mixture of 80 parts polyurethane SU 4715 (Firma Stahl) or some similar polyurethane material with the addition of 20 parts ferrite powder of granular size 10 microns, whereby Butamon is used as diluting medium, in order to process the mixture into an easily spreadable mass of material of approximately mPa · S.

In the example shown in Fig. 3, the easily spreadable mass forming coating 9 is applied directly on a strip of the non-coated fleece 11, unwound from a supply roll, and the strip of non-coated

fleece 11 is carried through a coating device, in the case of the example being shown by an applicator 13. The strip of fleece 7 with already applied and still wet coating 9 is thus carried through a dryer 15 and following drying of coating 9 is rolled up into a roll 17.

Fig. 4 shows a modified process for the execution, in which the easily spreadable material forming coating 9 is not being applied directly by means of the applicator onto non-coated PET-fleece 11, but rather first of all onto the strip of a silicon-coated carrier 17, for example in the form of a strip of paper or foil, which is added from a supply roll 19 of applicator 13. Following application of coating 9 on support 17, this together with the strip of non-coated PET-fleece 11 is fed to a calendar arrangement 21, where coating 9 is transmitted from carrier 17 onto fleece 11 by the coating on of a lamina. Subsequently the strips of carrier 17 and fleece 7 having coating applied thereon run through the dryer 15. Following running through dryer 15, carrier 17 is separated from coated fleece 7 and is rolled separately into a roll 23. Coated fleece 7 is rolled into the roll 25. The carrier rolled into roll 23 can be used again, in other words for another manufacturing process for which it can replace the supply roll 19, when this roll is depleted.

Patent Claims

- 1) Method for producing a foam element (1), especially a foam padding part of an aircraft or vehicle seat, in which a layer of a material which during the foaming process is forming a barrier layer between the foam material and the relevant wall part is embedded therein, characterized in that a fleece (7) with ferromagnetic coating (9) is used as the layer forming the barrier layer and that the fleece (7) is held detachably in position by means of a device on the wall part producing a magnetic field, cooperating with the ferromagnetic coating (9).
- 2) Method as in Claim 1, characterized in that a fleece (7) is used on polyester base of 20 to 60 g/m².
- 3) Method as in Claim 2, characterized in that a PET-fleece (7) is used with a ferromagnetic coating (9) of 60 to 100 g/m².
- 4) Method as in Claim 2 or 3, characterized in that a composition is used forming the ferromagnetic coating (9) which includes 80 parts polyurethane and 20 parts ferrite powder and is processed with a solvent into an easily spreadable material.
- 5) Method as in Claim 4, characterized in that polyurethane (SU-4715, Firma Stahl) and iron particles the size of 10 microns are used, and that Butamon is used as solvent for the processing into easily spreadable material.
- 6) Method as in one of the Claims 1 to 5, characterized in that a layer is formed made up of the easily spreadable material by application by means of blade or nozzle, on a strip of a carrier (17) being moved relative to the applicator (13).
- 7) Method as in Claim 6, characterized in that the fleece (1) to be coated is used in turn as carrier, on which the easily spreadable material is applied directly.
- 8) Method as in Claim 6, characterized in that a strip of the silicon-coated carrier (17) is moved relative to the applicator (13) and is provided with the coating (9), and that the coated carrier (17) together with a strip of the fleece (11) is guided

through a laminating arrangement (21) and the coating (9) is laminated from carrier (17) therein onto the fleece (11).

- 9) Method as in Claim 7 or 8, characterized in that the strip of the coated fleece (7) is carried through a dryer (15).
- 10) Method as in Claims 8 and 9, characterized in that the strips of the carrier (17) and the fleece (7) having the ferromagnetic coating (9) are separated from one another following passage through the dryer (15).
- 11) Foam element (1) is produced according to the method as in one of the Claims 1 to 10, which foam element has a layer of a fleece (7) with ferromagnetic coating (9) on at least one section of its surface.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Declaration and Power of Attorney for Patent Application Erklärung für Patentanmeldungen mit Vollmacht

German Language Declaration

Als nachstehend benannter Erfinder erkläre ich hiermit an Eides Statt:

daß mein Wohnsitz, meine Postanschrift und meine Staatsangehörigkeit den im nachstehenden nach meinem Namen aufgeführten Angaben entsprechen, daß ich nach bestem Wissen der ursprüngliche, erste und alleinige Erfinder (falls nachstehend nur ein Name angegeben ist) oder ein ursprünglicher, erster und Miterfinder (falls nachstehend mehrere Namen aufgeführt sind) des Gegenstandes bin, für den dieser Antrag gestellt wird und für den ein Patent für die Erfindung mit folgendem Titel beantragt wird:

deren Beschreibung hier beigefügt ist, es sei denn (in diesem Falle Zutreffendes bitte ankreuzen), diese Erfindung

- ☐ wurde angemeldet am _____
unter der US-Anmeldenummer oder unter der
Internationalen Anmeldenummer im Rahmen des
Vertrags über die Zusammenarbeit auf dem Gebiet
des Patentwesens (PCT)
_____ und am
_____ abgeändert (falls
zutreffend).

Ich bestätige hiermit, daß ich den Inhalt der oben angegebenen Patentanmeldung, einschließlich der Ansprüche, die eventuell durch einen oben erwähnten Zusatzantrag abgeändert wurde, durchgesehen und verstanden habe.

Ich erkenne meine Pflicht zur Offenbarung jeglicher Informationen an, die zur Prüfung der Patentfähigkeit in Einklang mit Titel 37, Code of Federal Regulations, § 1.56 von Belang sind.

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled

METHOD FOR PRODUCING A FOAM

ELEMENT, ESPECIALLY A FOAM PADDING

ELEMENT FOR A PLANE OR VEHICLE SEAT

the specification of which is attached hereto unless the following box is checked:

- ☒ was filed on July 24, 1999
as United States Application Number or PCT
International Application Number
PCT/EP99/05303 and was amended on
_____ (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56.

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German Language Declaration

Ich beanspruche hiermit ausländische Prioritätsvorteile gemäß Title 35, US-Code, § 119 (a)-(d), bzw. § 365(b) aller unten aufgeführten Auslandsanmeldungen für Patente oder Erfinderurkunden, oder § 365(a) aller PCT internationalen Anmeldungen, welche wenigstens ein Land ausser den Vereinigten Staaten von Amerika benennen, und habe nachstehend durch ankreuzen sämtliche Auslandsanmeldungen für Patente bzw. Erfinderurkunden oder PCT internationale Anmeldungen angegeben, deren Anmeldetag dem der Anmeldung, für welche Priorität beansprucht wird, vorangeht.

Prior Foreign Applications
(Frühere ausländische Anmeldungen)

199 00 623.7 DE
(Number) (Country)
(Number) (Land)

(Number) (Country)
(Number) (Land)

Ich beanspruche hiermit Prioritätsvorteile unter Title 35, US-Code, § 119(e) aller US-Hilfsanmeldungen wie unten aufgezählt.

(Application No.) (Filing Date)
(Aktenzeichen) (Anmeldetag)

(Application No.) (Filing Date)
(Aktenzeichen) (Anmeldetag)

Ich beanspruche hiermit die mir unter Title 35, US-Code, § 120 zustehenden Vorteile aller unten aufgeführten US-Patentanmeldungen bzw. § 365(c) aller PCT internationalen Anmeldungen, welche die Vereinigten Staaten von Amerika benennen, und erkenne, insofern der Gegenstand eines jeden früheren Anspruchs dieser Patentanmeldung nicht in einer US-Patentanmeldung, bzw. PCT internationalen Anmeldung in in einer gemäß dem ersten Absatz von Title 35, US-Code, § 112 vorgeschriebenen Art und Weise offenbart wurde, meine Pflicht zur Offenbarung jeglicher Informationen an, die zur Prüfung der Patentfähigkeit in Einklang mit Title 37, Code of Federal Regulations, § 1.56 von Belang sind und die im Zeitraum zwischen dem Anmeldetag der früheren Patentanmeldung und dem nationalen oder im Rahmen des Vertrags über die Zusammenarbeit auf dem Gebiet des Patentwesens (PCT) gültigen internationalen Anmeldetags bekannt geworden sind.

(Application No.) (Filing Date)
(Aktenzeichen) (Anmeldetag)

(Application No.) (Filing Date)
(Aktenzeichen) (Anmeldetag)

Ich erkläre hiermit, daß alle in der vorliegenden Erklärung von mir gemachten Angaben nach bestem Wissen und Gewissen der Wahrheit entsprechen, und ferner daß ich diese eidesstattliche Erklärung in Kenntnis dessen ablege, daß wissentlich und vorsätzlich falsche Angaben oder dergleichen gemäß § 1001, Title 18 des US-Code strafbar sind und mit Geldstrafe und/oder Gefängnis bestraft werden können und daß derartige wissentlich und vorsätzlich falsche Angaben die Rechtswirksamkeit der vorliegenden Patentanmeldung oder eines aufgrund deren erteilten Patentes gefährden können.

I hereby claim foreign priority under Title 35, United States Code, § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate, or § 365(a) of any PCT International application which designated at least one country other than the United States, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or PCT International application having a filing date before that of the application on which priority is claimed.

Priority Not Claimed
Priorität nicht beansprucht

11 January 1999
(Day/Month/Year Filed)
(Tag/Monat/Jahr der Anmeldung)



(Day/Month/Year Filed)
(Tag/Monat/Jahr der Anmeldung)



I hereby claim the benefit under Title 35, United States Code, § 119(e) of any United States provisional application(s) listed below.

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s), or § 365(c) of any PCT International application designating the United States, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT International application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, § 1.56 which became available between the filing date of the prior application and the national or PCT International filing date of this application.

(Status) (patented, pending, abandoned)
(Status) (patentiert, schwebend, aufgegeben)

(Status) (patented, pending, abandoned)
(Status) (patentiert, schwebend, aufgegeben)

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

German Language Declaration

VERTRETUNGSVOLMACHT: Als benannter Erfinder beauftrage ich hiermit den (die) nachstehend aufgeführten Patentanwalt (Patentanwältin) und/oder Vertreter mit der Verfolgung der vorliegenden Patentanmeldung sowie mit der Abwicklung aller damit verbundenen Angelegenheiten vor dem US-Patent- und Markenamt: (Name(n) und Registrationsnummer(n) auflisten)

POWER OF ATTORNEY: As a named inventor, I hereby appoint the following attorney(s) and/or agent(s) to prosecute this application and transact all business in the Patent and Trademark Office connected therewith: (list name and registration number)

David S. Abrams Reg. No. 22,576 Lance G. Johnson Reg. No. 32,531
 Robert H. Berdo Reg. No. 19,415 Dean H. Nakamura Reg. No. 33,981
 Alfred N. Goodman Reg. No. 26,458 Stacey J. Longanecker Reg. No. 33,952
 Mark S. Bicks Reg. No. 28,770 Joseph J. Buczynski Reg. No. 35,084
 John E. Holmes Reg. No. 29,392
 Garrett V. Davis Reg. No. 32,023

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Mark S. Bicks (202) 659-9076

Vor- und Zuname des einzigen oder ersten Erfinders	Full name of sole or first inventor <u>Konstantinos Poulakis</u>
Unterschrift des Erfinders Datum	Inventor's signature <u>[Signature]</u> Date <u>Feb. 5, 2001</u>
Wohnsitz	Residence <u>Pulsnitz, Germany</u> <u>DEX</u>
Staatsangehörigkeit	Citizenship <u>German</u>
Postanschrift	Post Office Address <u>Kamenezer Strasse 19</u>
	<u>D-01896 Pulsnitz, Germany</u>
Vor- und Zuname des zweiten Miterfinders (falls zutreffend)	Full name of second joint inventor, if any
Unterschrift des zweiten Erfinders Datum	Second Inventor's signature Date
Wohnsitz	Residence
Staatsangehörigkeit	Citizenship
Postanschrift	Post Office Address

(Im Falle dritter und weiterer Miterfinder sind die entsprechenden Informationen und Unterschriften hinzuzufügen.)

(Supply similar information and signature for third and subsequent joint inventors.)